

REMARKS

The foregoing amendment does not include the introduction of new matter into the present application for invention. Therefore, the Applicant, respectfully, requests that the above amendment be entered in and that the claims to the present application be, kindly, reconsidered.

The Office Action dated December 4, 2003 has been received and considered by the Applicants. Claims 1-25 are pending in the present application for invention. Claims 1-22 stand rejected and Claims 23-25 are objected to by the December 4, 2003 Office Action.

The Examiner suggests the addition of headings to the specification of the present application for invention.

The Applicants, respectfully, decline to add headings to the specification because they are not required in accordance with MPEP §608.01(a).

The Abstract of the disclosure is objected to because it contains references to figures. The foregoing amendment to the specification has corrected this oversight.

The Office Action rejects Claims 1, 4, 9, 12, 15, and 20 under the provisions of 35 U.S.C. §102(e) as being anticipated by U.S. Patent No. 6,153,063 issued to Yamada, et al. (hereinafter referred to as Yamada). The Examiner states that Yamada discloses a method of recording marks within a phase change medium employing a first write pulse preceded by cooling pulse having a lower power level than the erase power level. The Examiner further states that Yamada teaches that the last write pulse of the sequence is directly followed by a rear heating pulse having a rear heating power level that is higher than the erase power level. In making these statements the Examiner has used a single pulse within Yamada to read on multiple pulses recited by the rejected claims. The Applicant, respectfully, submit that it is not proper to read multiple pulses as recited by the rejected claims upon a single pulse disclosed by Yamada. The Applicant, respectfully, assert that the examiner is ignoring the limitations recited by the elements of the rejected claims by combining multiple pulses in to a single pulse. In an effort to move the present application for invention towards allowance, the rejected claims have been amended to distinctly recite the features of the present invention. The amended claims distinguish the present invention from the teachings of Yamada, by reciting that different power levels are used in the various pulses recited by the rejected claims. In this manner it is not

possible to read the multiple pulses recited by the claims of the present invention upon a single pulse of a prior art reference, such as Yamada. Accordingly, the Applicants respectfully submit that the claims are allowable over Yamada.

The Office Action rejects Claims 1, 3, 4, 6, 9, 12, 14, 15, 17, and 20 under the provisions of 35 U.S.C. §103(a) as being unpatentable over U.S. Patent No. 6,345,026 issued to Furukawa et al. (hereinafter referred to as Furukawa et al.) in view of U.S. Patent No. 5,818,808 issued to Takada et al. (hereinafter referred to as Takada et al.). The Examiner states that Furukawa et al. discloses recording within a phase change recording medium wherein the last write pulse is followed by a rear heating pulse having a rear heating power level that is higher than the erase power level. The Examiner states that Furukawa et al. does not disclose the cooling pulse having the cooling power level preceding the first write pulse of the sequence of pulses but that Takada et al. discloses the use of the cooling pulse having a power level lower than the erasure power level preceding the first write pulse. The Examiner indicates that column 10, lines 44-49, of Takada et al. disclose the use of cooling pulse having a power level lower than the erasure power level preceding the first write pulse. The Applicants, respectfully, disagree. The Applicants would like to, point out, that column 10, lines 44-49, of Takada et al. discuss the duty cycles of pulses employed and not the power levels as asserted by the Office Action. Accordingly, this rejection is respectfully traversed.

The Office Action rejects Claims 2, 5, 7, 13, 16, and 18 under the provisions of 35 U.S.C. §103(a) as being unpatentable over Furukawa et al. in view of Takada et al. as applied to Claims 1, 3, 4, 6, 9, 12, 14, 15, 17, and 20 and in further view of U.S. Patent No. 5,590,111 issued to Kirino et al. (hereinafter referred to as Kirino et al.). The Examiner states that Furukawa et al. in view of Takada et al. does not disclose that the rear heating power level is dependent on the properties of recording medium and that Kirino et al. discloses a rear heating power level that is dependent upon the properties of the recording medium at column 15, line 62-column 16, line 10 and FIG.19B. The Applicants would like to, respectfully, point out that column 15, line 62-column 16, line 10 of Kirino et al. discusses the use of a laser driver having different power levels for writing. Column 15, line 62-column 16, line 10 of Kirino et al. discusses variation in the sensitivity of the recording medium due to ambient conditions and variations in the recorder used. Nowhere within the cited sections of Kirino et al. is there any disclosure, or suggestion, for employing different power levels dependent upon the properties of

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the recording medium. Accordingly, this rejection is respectfully, traversed.

The Office Action rejects Claims 1, 4, 8, 10-12, 15, 19, and 21-22 under the provisions of 35 U.S.C. §103(a) as being unpatentable over Furukawa et al. in view of U.S. Patent No. 5,825,742 issued to Tanaka et al. (hereinafter referred to as Tanaka et al.). The Examiner states that Furukawa et al. discloses the rear heating power level recited rejected Claim 1. The Applicants would like to, respectfully, point out that rejected Claim 1 recites "a last write pulse of a sequence is directly followed by a rear heating pulse" and the rejection made by the Examiner uses the last write pulse as both the last write pulse and the rear heating pulse. There is no separate rear heating pulse taught in Furukawa et al. and the Examiner states as much in the rejection. Accordingly, the Applicants, respectfully, submit that are features within the rejected claims that are unbound or not addressed by the Office Action. However, in an effort to move the present application towards allowance, Claim 1 has been amended to more clearly distinguish the present invention from the combination made in the Office Action by including the recitation that the rear heating power level is higher than the erase power level but less than the level of said last write pulse. A similar amendment has been made to independent Claim 12.

The Examiner states that Furukawa et al. discloses the cooling power level is lower than the erasure power level but does not disclose that a cooling pulse of the cooling power level preceding the first write pulse in a sequence pulses. Regarding Claims 10 and 21, the Examiner states that Tanaka et al. discloses using a cooling pulse at a cooling power level that is lower than the erase power level preceding the first write pulse within a sequence of write pulses. The Examiner further states that Tanaka et al. discloses using first second and third cooling powers wherein $c1=c2=c3$. The foregoing amendment to the claims has amended independent Claims 10 and 21 such that $c1$, $c2$ and $c3$ are not equal in order to more clearly distinguish the present invention from the teachings of Tanaka et al.

The Office Action objects to Claims 23-25 under the provisions of CFR §1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim. The Examiner states that Claims 23-25 are drawn to a recording medium and therefore do not further limit the recording device of Claim 13, 16, or 18. The foregoing amendment to the claims has corrected this oversight.


New Claims 26-29 have been added that recite features of similar scope to Claim 1-25 in terms of the recording media. Accordingly, these claims are believed to be allowable for

the reasons stated above for Claim 1-25.

Applicant is not aware of any additional patents, publications, or other information not previously submitted to the Patent and Trademark Office which would be required under 37 C.F.R. 1.99.

In view of the foregoing amendment and remarks, the Applicant believes that the present application is in condition for allowance, with such allowance being, respectfully, requested.

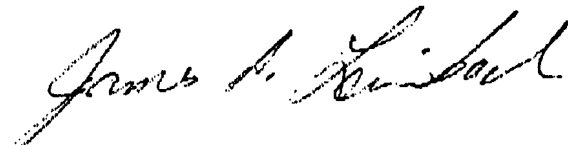
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